

a vehicle occupant, said inflatable vehicle occupant protection device comprising overlying panels that are interconnected along at least a portion of a perimeter of said inflatable vehicle occupant protection device to define an inflatable volume of said inflatable vehicle occupant protection device, said inflatable vehicle occupant protection device when inflated having a thickness measured between overlying points on said overlying panels at a location where the head of an occupant may contact said inflatable vehicle occupant protection device; and

an inflation fluid source that provides inflation fluid to said inflatable volume for inflating said inflatable vehicle occupant protection device, said inflation fluid in said inflatable vehicle occupant protection device being at a pressure when said inflatable vehicle occupant protection device is inflated, wherein said pressure is a predetermined function of said thickness of said inflatable vehicle occupant protection device, said pressure being sufficient to prevent the head of the occupant from striking the side structure through said thickness of said inflatable vehicle occupant protection device.

2. (Amended) Apparatus for helping to protect an occupant of a vehicle that has a side structure and a roof, said apparatus comprising:

an inflatable vehicle occupant protection device that is inflatable in a direction away from the vehicle roof into a position between the side structure of the vehicle and

a vehicle occupant, said inflatable vehicle occupant protection device comprising overlying panels that are interconnected along at least a portion of a perimeter of said inflatable vehicle occupant protection device to define an inflatable volume of said inflatable vehicle occupant protection device, said inflatable vehicle occupant protection device when inflated having a thickness measured between overlying points on said overlying panels at a location where the head of an occupant may contact said inflatable vehicle occupant protection device; and

an inflation fluid source that provides inflation fluid to said inflatable volume for inflating said inflatable vehicle occupant protection device, said inflation fluid in said inflatable vehicle occupant protection device being at a pressure when said inflatable vehicle occupant protection device is inflated, said pressure having a functional relationship with said thickness of said inflatable vehicle occupant protection device according to:

$$P = (4.2 \times 10^7) T^{-2.8};$$

wherein P represents said pressure expressed in kilopascals and T represents said thickness expressed in millimeters.

3. (Amended) Apparatus as defined in claim 1, wherein said thickness is 120-150 millimeters.

5. (Amended) Apparatus as defined in claim 2, wherein said thickness is 120-150 millimeters.

8. (Amended) Apparatus for helping to protect an occupant of a vehicle that has a side structure and a roof, said apparatus comprising:

an inflatable vehicle occupant protection device that is inflatable in a direction away from the vehicle roof into a position between the side structure of the vehicle and a vehicle occupant, said inflatable vehicle occupant protection device comprising overlying panels that are interconnected along at least a portion of a perimeter of said inflatable vehicle occupant protection device to define an inflatable volume of said inflatable vehicle occupant protection device, said inflatable vehicle occupant protection device when inflated having a thickness measured between overlying points on said overlying panels at a location where the head of an occupant may contact said inflatable vehicle occupant protection device; and

an inflation fluid source that provides inflation fluid to said inflatable volume for inflating said inflatable vehicle occupant protection device, said inflation fluid in said inflatable vehicle occupant protection device being at a pressure when said inflatable vehicle occupant protection device is inflated, said pressure having a functional relationship with said thickness of said inflatable vehicle occupant protection device according to:

$$P = (3.0 \times 10^5) T^{-1.92},$$

wherein P represents said pressure expressed in kilopascals and T represents said thickness expressed in millimeters.

11. (Amended) Apparatus as defined in claim 8, wherein said thickness is 120-150 millimeters.

15. (Amended) Apparatus as defined in claim 14, wherein said overlying panels are interconnected to define inflatable areas of said inflatable curtain, said thickness being measured between said overlying panels within said inflatable areas.

21. (Amended) Apparatus as recited in claim 2, wherein said pressure is sufficient to prevent an occupant's head having a mass of 6.08 kilograms travelling at a velocity of eighteen miles per hour from striking the side structure through said thickness of said inflatable vehicle occupant protection device.

22. (Amended) Apparatus as recited in claim 8, wherein said pressure is sufficient to prevent an occupant's head having a mass of 6.08 kilograms travelling at a velocity of twelve miles per hour from striking the side structure through said thickness of said inflatable vehicle occupant protection device.

Please add new claim 23 as follows:

23. Apparatus as defined in claim 1, wherein said predetermined function also includes at least one value based on a velocity at which an occupant's head having a given mass may impact said inflatable vehicle occupant protection device.